

What Is Claimed Is:

1. A crown gear assembly comprising
a crown gear (11) rotatably supported around a first axis (A1)
and having teeth (13) which are provided with flanks (14, 15) whose mantle
lines extend substantially radially relative to the first axis (A1); and
5 a pinion (21) rotatably supported around a second axis (A2)
extending perpendicularly relative to the first axis (A1), the pinion having
teeth (23) which are provided with flanks whose mantle lines extend
substantially parallel relative to the second axis (A2), wherein, on the radial
outside of the crown gear teeth (13), the pinion (21) includes a collar (25)
10 adapted to contact a circumferential face of the crown gear (11).
2. A crown gear assembly according to claim 1, wherein
the collar (25) is formed internally of an addendum circle of the pinion teeth
(23).
3. A crown gear assembly according to claim 1, wherein
15 the collar (25) is integrally connected to the pinion teeth (23).
4. A crown gear assembly according to claim 1, wherein
the collar (25) is axially spaced along the second axis (A2) from the pinion
teeth (23).
5. A crown gear assembly according to claim 1, wherein
20 the circumference of the collar (25) is substantially equal to the outer
circumference of the pinion (21) defined by the pinion teeth (23).
6. A crown gear assembly comprising:

a crown gear (11) rotatably supported around a first axis (A1) and having teeth (13) which are provided with flanks (14, 15) whose mantle lines extend substantially radially relative to the first axis (A1); and

5 a pinion (21) rotatably supported around a second axis (A2) extending perpendicularly relative to the first axis (A1), the pinion having teeth (23) which are provided with flanks whose mantle lines extend substantially parallel relative to the second axis (A2), wherein, on the radial inside of the crown gear teeth (13), the crown gear includes a collar (27) adapted to contact an end face (26) of the pinion (21).

10 7. A crown gear assembly according to claim 6, wherein the collar (27) is integrally connected to the crown gear teeth (13).

8. A crown gear assembly according to claim 6, wherein the collar (27) is radially spaced toward the first axis (A1) from the crown gear teeth (13).

15 9. A crown gear assembly according to claim 6, wherein the collar (27) is formed internally of the addendum faces of the crown gear teeth (13).

10. A crown gear assembly according to claim 1, wherein a shaft (24) carrying the pinion (11) is supported so as to be axially floating.

20 11. A crown gear assembly according to claim 6, wherein a shaft (24) carrying the pinion (11) is supported so as to be axially floating.